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(56) Documents cited
GB 1580841
GB 1287732
GB 1274688
GB 1105321
GB 0863183

(58) Field of search
F2M
F2H

(54) Butt joint bracket

(57) A plate is provided with pressed out spikes 4 and holes/slots 1,2,3, which is used to butt-joint a member 2A to a transverse member 2B, eg in a ceiling structure to which plasterboard are nailed. The side A of the plate is first hammered on to the end of the member 2A, then screws or nails are inserted through holes 2 to further secure the plate to member 2A. The member 2A is then attached to member 2B by inserting nails or screws through the adjusting slots 3 and holes 1. The joint prevents twisting of the member 2A. It may be used in fencing, sheds and in other applications.

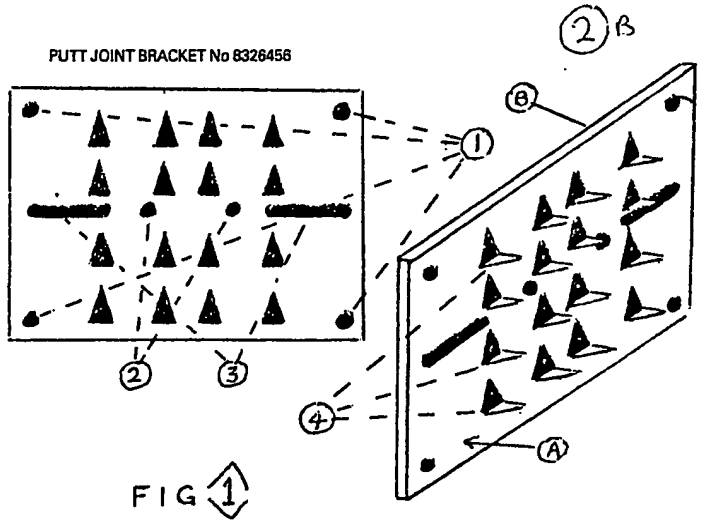


FIG 1

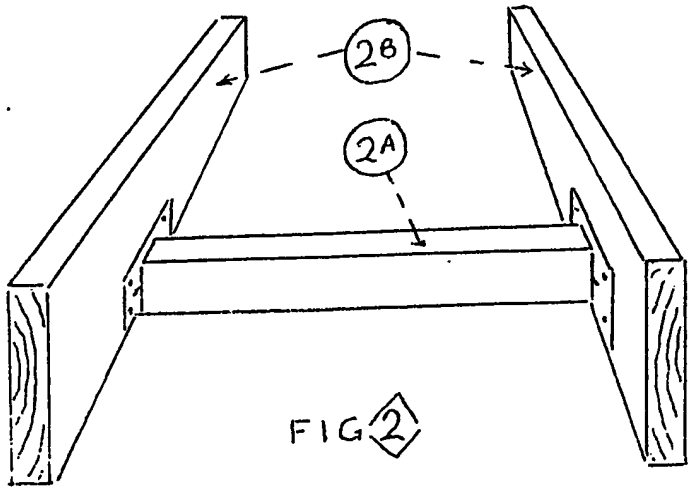


FIG 2

GB 2 151 743 A

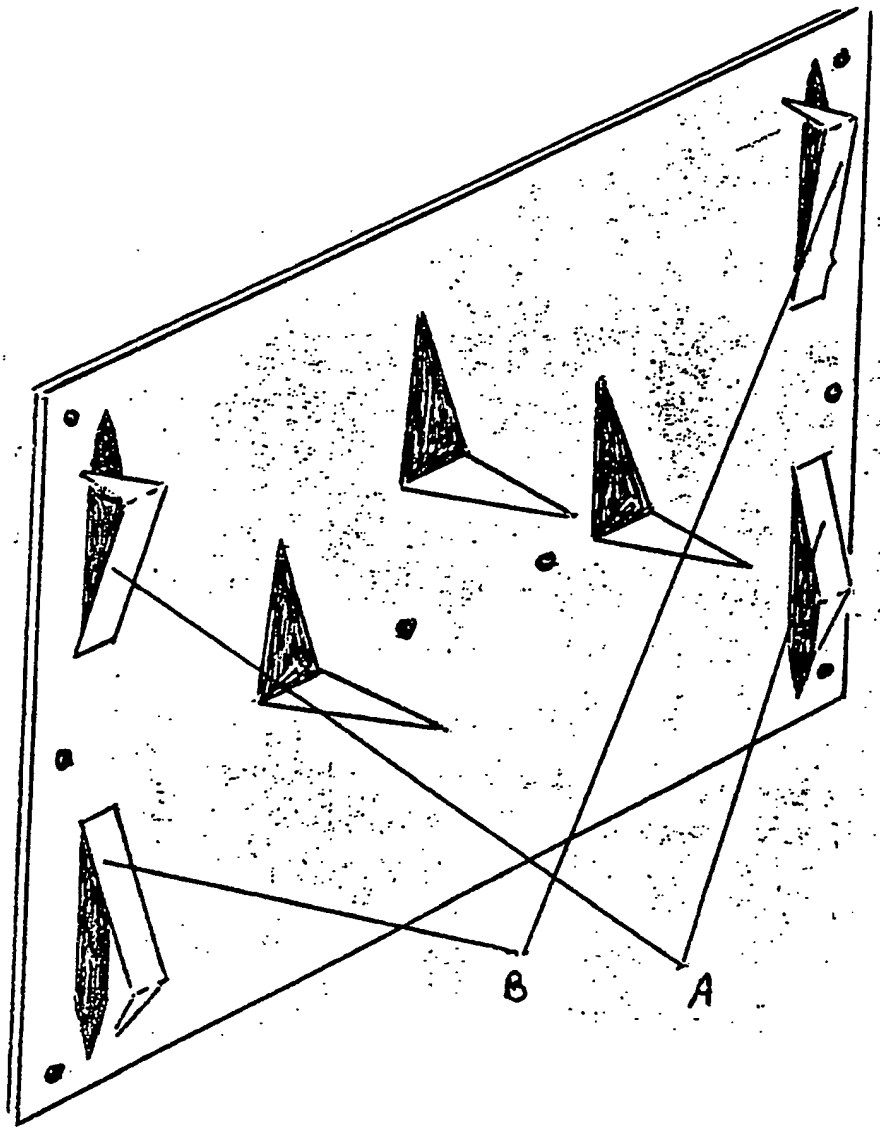


FIG 1A.

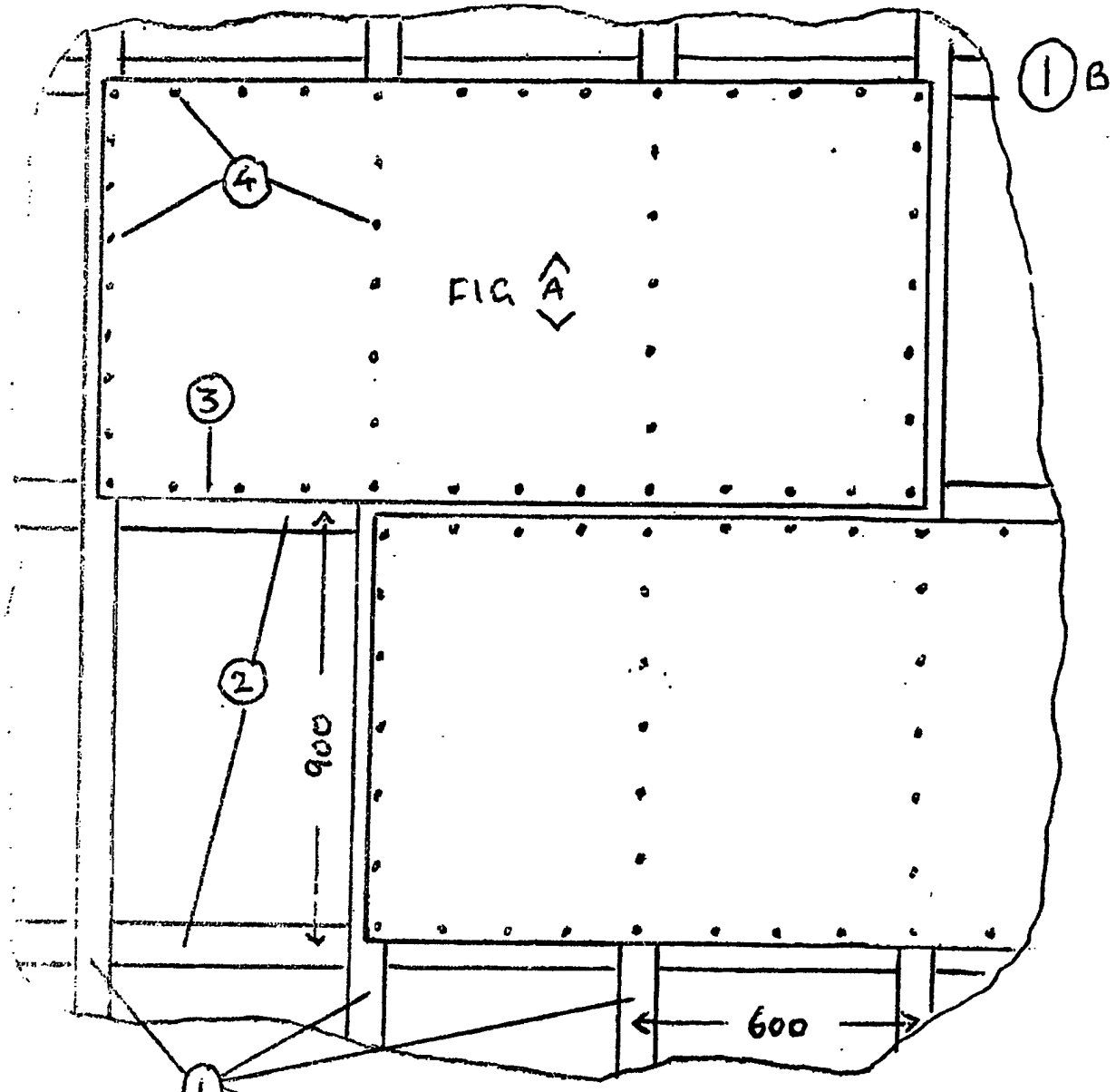


FIG A

BUTT JOINT BRACKET
No 8326456

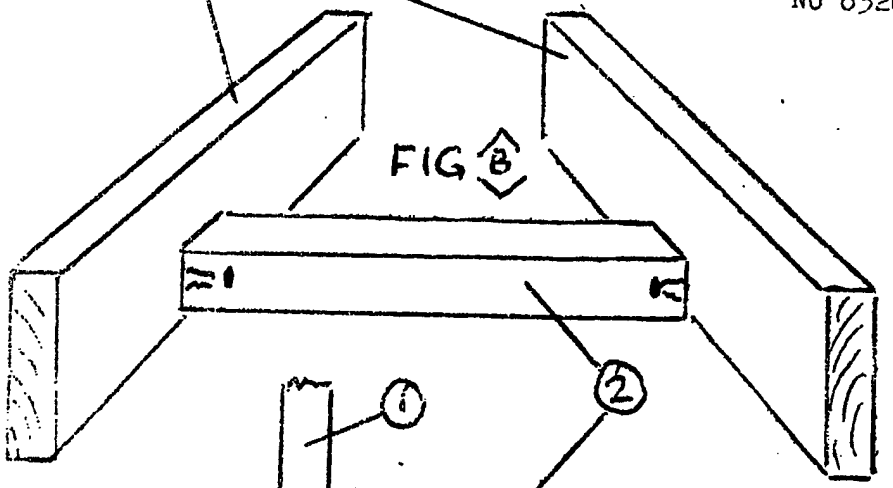


FIG B

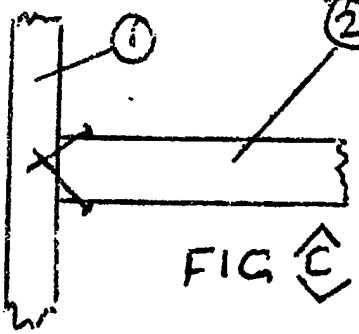


FIG C

BUTT JOINT BRACKET No 8326456

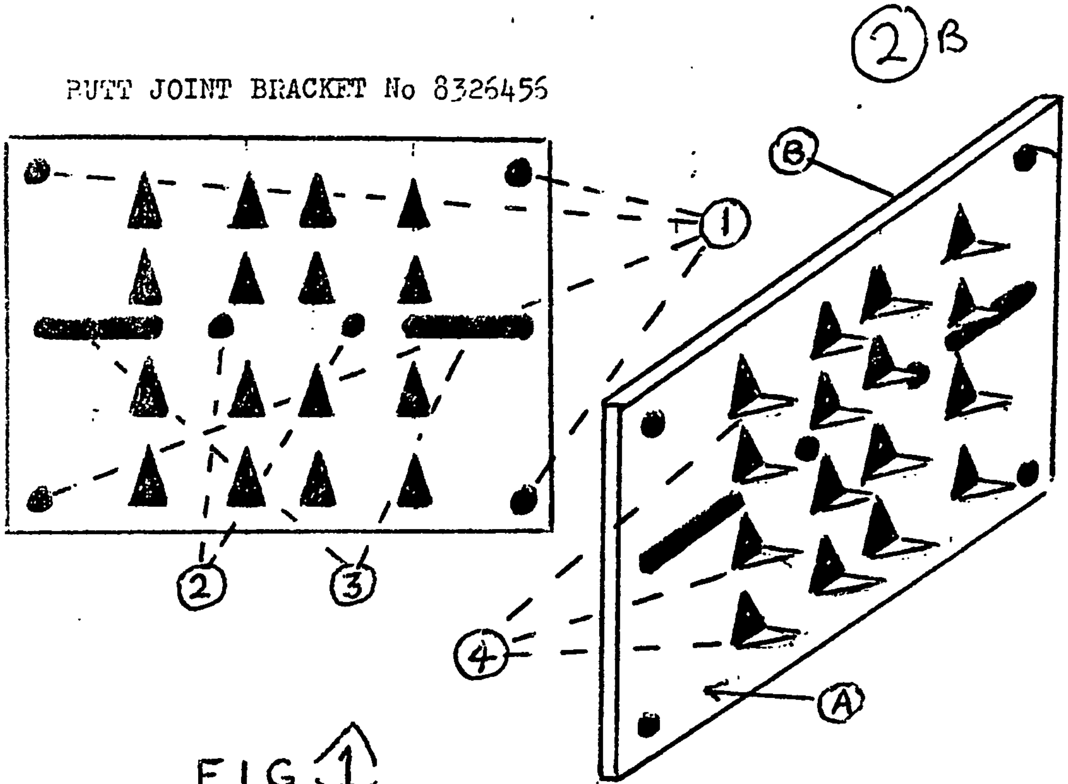


FIG 1

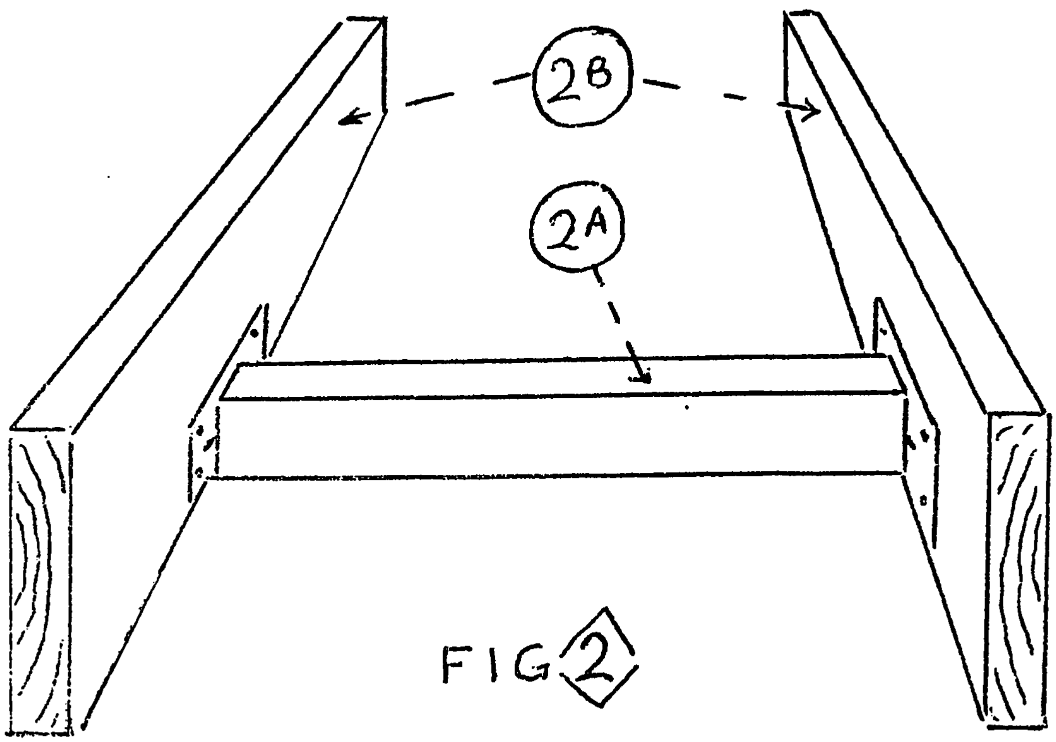
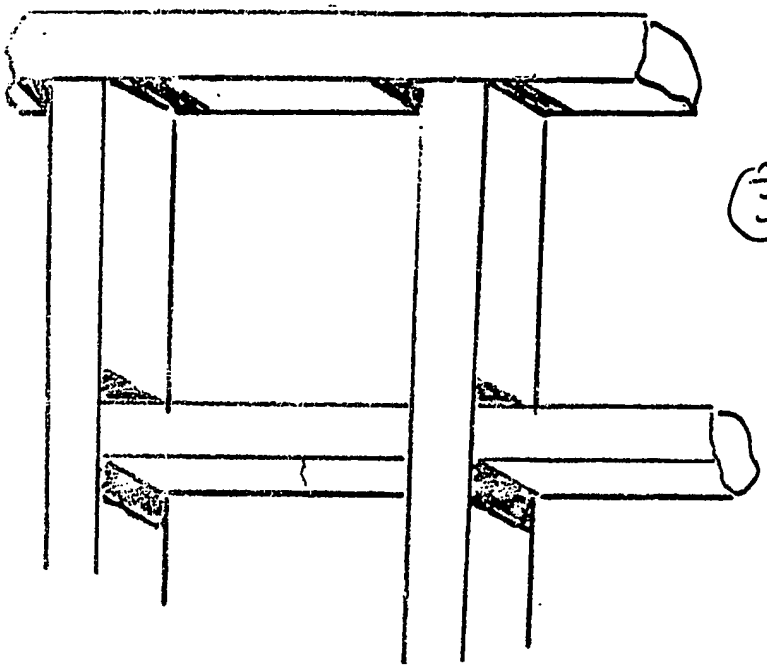


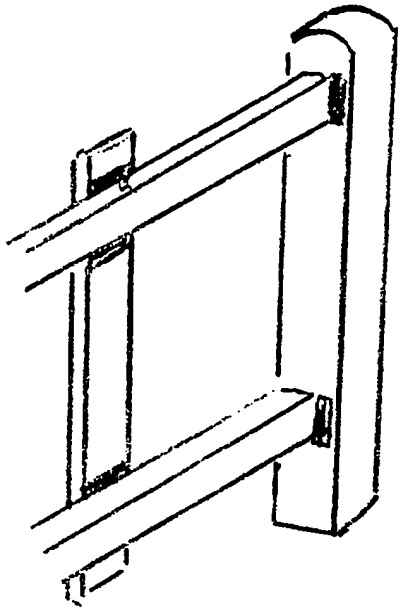
FIG 2

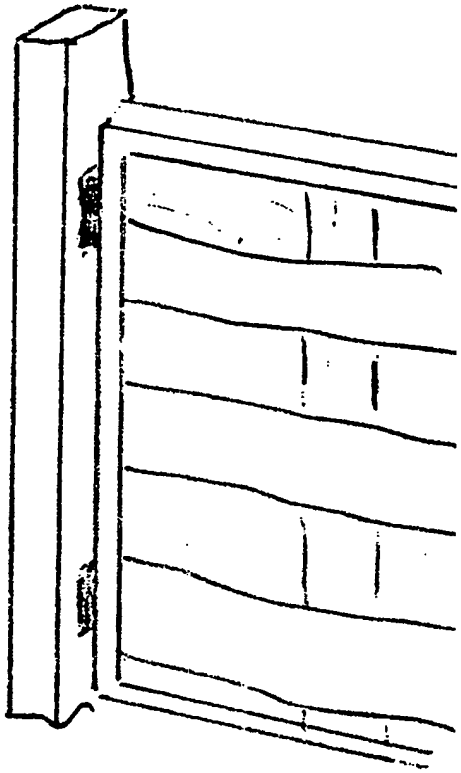


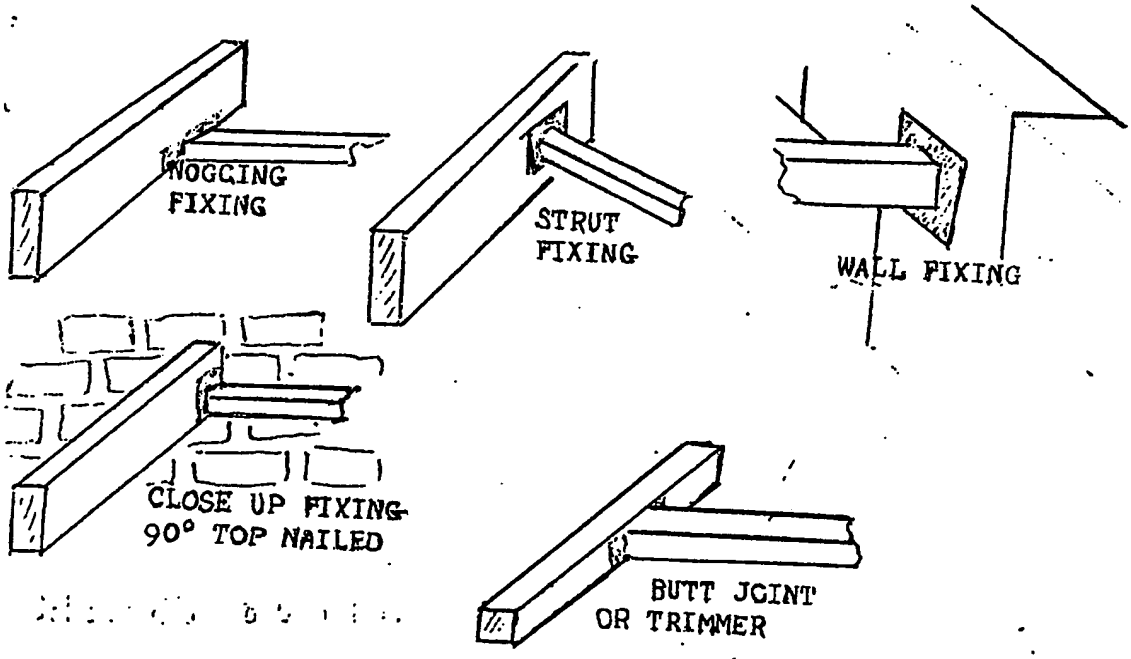
(3)B

OTHER USES OF BUTT JOINT BRACKET No 8326456

FOR USE IN STUDDING AND FENCING






NOGGING
FIXING
STRUT
FIXING
WALL FIXING
CLOSE UP FIXING
90° TOP NAILED
BUTT JOINT
OR TRIMMER

SPECIFICATION

Butt joint bracket

I have been in the building trade 30 years as a plasterer.

One of the operations within the trade, is fixing plasterboards to ceilings Figure A 1 B Example ..... Upstairs ceilings consist of trusses I set at 600 mil centres (say we are using boards sized 1800 × 900 × 12) with noggins 2 at 900 mil centres to receive edge of board 3 (code of practise) the boards have to be nailed every 150 mil to all timbers with 40 mil clout nails 4.

The noggins are cut to size to fit inbetween the trusses (spaced at 600 mil centres) and the noggin should be 38mil × 38 mil thick on site the noggins are fixed by "Tosh Nailing" Figure B with 80 mil to 100 mil nails. On nailing diagonaly through both sides of each end of noggin into trusses, the noggin splits wide open (especialy as the noggin timber is cut from cheaper knotted wood). Even if the timbers do not split, the angle of the tosh nails Figure C causes an axis to allow the noggin to twist when plasterboards are nailed up.

Usually on nailing onto centre of noggin with three nails the noggin usually splits and goes up into the ceiling void or else twists. When the next board is butted up to the first and three more nails are inserted in same noggin (If still there) it twists the other way and dislodges the nails in the first board erected, damaging the board and ripping.

Therefore on completion several codes of practise are broken.

No noggin.....twisted noggin.... only one nail used (99.9 %)

Broken board surface.... board fracture.... uneven surface....

The devise on page 2 A B C answers all these problems.

JOINTING

The construction industry BUTT joints timbers by TUSH nailing. This invention shown in Figure 1 improves the joint. The method of TUSH nailing, used since time began, has the tendancy to split the materials, twist and collapse.

The invention in Figure I eradicates the splitting of the materials and enforces rigidity with the strength to receive dead weight.

Figure I shows the invevtion as thus. A flat plate (invention) with device 4 pressed out to provide adhesion to end of 2A. Device 2 are fixing holes for atatching plate (invention) secureley to end of 2A. Device 3 adjustable fixing holes for fixing plate (invention) with 2A atatched onto 2B. Device I fixing holes for extra security contact to 2B.

The invention is a means of adjoining two materials by the BUTT joint method securely and soundly.

Side A of invention is hammered onto the end of 2A to give adhesion. Screws or nails are then forced through the fixing holes 2 and into the end of 2A. Item 2A with invention atatched is offered into a marrying position with 2B and then affixed through adjusting holes 3 with nails or screws close up to the sides of 2A. Nails or screws can then if required be affixed through holes I for added strength.

By using this method their is a rigid contact between item 2A and 2B without the splitting of timbers and without the twisting of 2A. The invention is treated for its preservation when manufactured and manufactured to sizes required by the industry.

Figure 2 shows construction details with inventions used.

ALTERNATE DESIGN FOR BUTT JOINT BRACKET

(A) Grasshopper legs could be incorporated for certain uses.

(A) Grasshopper legs are shorter than (B) grasshopper legs so as not to enter in same timber grain as the clip on the reverse of timber joist etc.

The amount of fixing legs are determined by site requirements.

EXAMPLES OF USE

On Habitable dwellings the joists have to have NOGGINGS fixed at regular intervals to receive plasterboards to eliminate sagging (mandatory Code of Practise). The NOGGINS are usually fixed by TUSH nailing which tends to split the noggins. The nails are also driven in through the noggin at an angle to the JOIST therefor arriving central allowing the nogging to twist on this axis when nailed by the plasterer on fixing plasterboards. But apart from this problem, whilst the plasterer is nailing (6 nails to a nogging) to the nogging it usually splits the nogging at the joist contact and sends the nogging into the ceiling void (never to be seen by building i inspectors) therefor allowing wheight to fall onto the ceiling at a later date. BUT most of all TWO Codes of Practise are being removed by neglect, ignorance, and unbeknowing by the Inspectors owing to the faults being hidden by the boarding operation.

The device (patent applied for) eliminates all problems. I feel when proven this device would become MANDATORY. WHEN WORKING up close to a wall the device can be rotated 90 degrees and nailed to the joist at the top. The device can be made to different sizes to accommodate any size timber for any type of BUTT joints required, even for offset degree mitres etc. The device can also be used for direct nailing of timbers to a BUTT joint of a wall intersection. The device can be used for.....

BUTT joints timber to timber. 90 degree mitre.

BUTT joints timber to timber any degree mitre.

BUTT joints timber to any other compatable material.

DITTO to. ..

BUILDING TRADE. .FENCING..SHEDBUILDING-..D.I.Y. and numerous other activities.

CLAIMS

1. The invention is a fastening devise, comprising of a plate having various spikes projecting from at least one face & at least 2 fixing holes with the addition of extra holes for added fixings, if required, as in drawings (20B) (2)D.

2. A fastener as in claim (I) having extra spikes (Known as grasshopper legs) for fixing to the construction as either a permanent fixing or as a

temporary fixing untill the final fixing of nails or screws, depending on requirements, through the extra holes provided as in drawings.

3. The invention is a butt joint devise as in claim (I) and (2) for butt jointing such as ceiling noggings with the novelty that their is no such devise manufactured at this time, for this particular operation.

4. A fastener as in Claim (I) and Claim (2) as described within Ref (2) A and Drawing (2) B. Along with Ref (2) C and Drawing (2) D along with abstracts (3) A and (3) B

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